

condyle in *Megaptera*, which also has a greater curvature and thickness of the body of the mandible, and shorter horns to the hyoid bone.

It is unfortunate that the soft parts of the Tay Whale were so decayed as to be useless for investigation, since many important features, *e. g.* the condition of the mucous membrane of the jejunum, were thus placed beyond the reach of the anatomist.

The work is a noteworthy contribution to the anatomy of *Megaptera*, though, perhaps, its interest and value might have been increased if more frequent references had been made to the labours of previous observers. A clearer conception of what has and what has not been previously described would thus have been obtained. Dr. Struthers, indeed, is to be congratulated on this further addition to his researches on the Cetacea, and though his official duties (from which, it is much to be regretted, ill-health has now relieved him) may have hampered and limited his work, yet this treatise is evidence of that scientific enthusiasm for which Scotch anatomists, such as the earlier Monros, Goodsir, and Turner, have been so famous. We look forward to further contributions from the pen of Dr. Struthers.

W. C. M.

MISCELLANEOUS.

On Excavations made in Rocks by Sea-Urchins.

By J. WALTER FEWKES*.

THE author has had an opportunity of observing excavations made by *Strongylocentrotus dröbachiensis* on the coast of Grand Manan, New Brunswick, where the reefs of hard mica-schist with veins of harder quartzite are bare at low tide but covered at high water. The cavities were so numerous that the rock was roughly honey-combed with these shallow excavations, and, moreover, spreading Algæ (*Lithothamnion* and *Melobesia*) sometimes covered the rock and the cavities. The author, indeed, thinks the presence of the latter may be necessary to the Sea-Urchins "for some reason." It would be as useful, however, to speculate on the relation of the same to the boring Annelids, unless the Algæ are eaten by the Echini—just as the common British *Echinus* fills its intestine with fragments of the stems of *Laminarie*, with perhaps a few fragments of the tubes of *Serpulæ*. He gives some interesting observations on the borings of *E. lividus* in pot-holes at Biarritz by Prof. Jules Marcou. In regard to the *modus operandi* of the borers Mr. Fewkes, after previous observers, gives the chief weight to the dental apparatus, probably assisted by the voluntary movements of the spines and the involuntary action caused by the waves moving the animal *in situ*. Two interesting plates illustrate the paper.

W. C. M.

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